Household Access to Credit in Times of A Natural Disaster – The Case of Kerala Floods

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Abstract

The floods that ravaged the state of Kerala caused unparalleled damage to the financial lives of the affected households. In such a scenario, access to credit is seen as the most crucial way to revive their lives. However, the credit markets do not always function in the expected lines. In light of this study, conducted a field survey among the loan officers of various financial institutions in Wayanad, to document the lending standards followed by them during the time of floods. Besides, the perspective from the side of households was also gathered to get an unbiased view of the situation. The data of the study were analysed using the weighted scoring method. It was found that overall demand for credit was higher for financial institutions, and as result, these institutions tightened their lending standards creating hurdles for households.

Keywords: - Credit, Financial institutions, Household, Kerala, Natural disasters

Introduction

Today, both industrialised and developing countries are experiencing an increase in the number of shocks, such as recessions or macroeconomic instability, which result in significant loss of life and property. Natural disasters, on the other hand, can have the most devastating results ever seen. The floods that hit Kerala were an example of this, it resulted in catastrophic damage to the life and property of people. Evidence on the impact of natural disasters on the financial access of households is incomplete by just analysing the credit taken from formal institutional sources like banks. In fact, data on credit taken from informal credit sources is often silent.

Even though recently there has been a surge of interest in studies that are investigating the economic impact of natural disasters, studies on the household as a unit are scarce, with just a little evidence on the same like household welfare (Yasuyuki Sawada, 2007) and income of households (Anh, 2014). However, the literature highlights access to credit as a major risk-coping strategies in natural disasters (Yasuyuki Sawada, 2007). Yet the impact on access and demand to finance remains understudied, particularly after natural disasters.

The study by Del Ninnoet (2003) found that, following a significant flood in 1988, households in Bangladesh borrowed significantly more. However, studies such as the latter which investigated the demand and access to credit are scarce. The present study is an attempt to study the impact of natural disasters on a household's credit demand and the approval of the same by financial institutions. For this purpose, the lending standards and loan demand in the rural markets, from the perceptive of loan officers and the demand for loan from households in general has been studied. Thus, giving an important insight into the major challenge

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faced by households in the credit markets in the aftermath of severe natural disasters.

This study makes some vital contributions. First, the study investigates household access to credit after a major catastrophe like floods. Thus, throwing important insights into how households react in the aftermath of a natural disaster? To the best of our knowledge, this is the first of its kind in Kerala. Secondly, the study also extends into examining the effect of natural disasters on the lending standards of various financial institutions in the region. The remaining of the paper is as follows. Sections II deals with literature review, while section III is related to the methodologies employed in this study. Section IV on the Data analysis part, while the last part concludes with conclusions and policy implications.

Review of literature

A natural disaster is defined in line with the study of Benson and Clay (2004), in which it is defined as the occurrence of an abnormal hazard that affects geographical areas causing substantial damage and disruption. They cause direct and indirect damages to economic activities in the short term (Hochrainer, 2009; Okuyama, 2003). In fact, a consensus on the short-term economic impacts of natural disasters appears to be emerging in the literature (see e.g., Loayza et al., 2009, Raddatz 2007). Most of this research has to rely either on cross-sectional surveys conducted during or after the crisis event or on short panel surveys in its pursuit to study the impact of these disasters (e.g., Fallon & Lucas, 2002).

However, we cannot make a generalisation on a natural disaster which affected a particular region to another incident which happened in some other part of the world. In fact, what seems obvious is that the economic impact of disasters would depend on the type and magnitude of the incident combined with the underlying socio-economic and physical vulnerability of the affected region. Thus, the impact of the floods that happened in Kerala is unique by its own terms and the way local credit market functioned in those times determines the progress of individuals and households residing in those affected areas. In fact, this is also substantiated by the recent macroeconomic evidence of the financial intermediation framework mitigating adverse economic consequences of these disasters (Loayza et al., 2012; Noy, 2009; Skidmore and Toya, 2002; von Peter et al., 2012).

Financial institutions by incorporating strict lending standards, can adversely impact the supply of credit in times of various events such as recession and external shocks. Thus, the lender's response to the scenario was also closely evaluated in the literature. This is important as this helped to get a complete picture of how things played out on the ground. For this purpose, most of the studies used bank loan officer surveys, some of the studies that used it to identify credit supply shocks include Lown and Morgan [2006]; Bassett et al. [2014]; Becker and Ivashina [2014] and more recently in the Euro area Del Giovane et al. [2011]; Ciccarelli et al. [2015]; van der Veer and Hoeberichts [2016].

Objectives

1. To assess the demand for credit by the households in the aftermath of the Kerala floods.
2. To investigate the household access to credit in the aftermath of the Kerala floods.
3. To evaluate the lending standards of various financial institutions after the floods.

Research Methodology

The study gathered primary data from households and loan officers from financial institutions through a field survey. The data used for the study was generated through a comprehensive household survey in the districts of Wayanad in Kerala. The survey was carried out immediately in the aftermath of the floods in November 2019. The survey was administered using a questionnaire which enquired about the demand for loan by the households, the incidence of indebtedness (which represent access to credit) and also about the lending standards adhered to by the financial institutions. The sample household for the study was identified using the purposive sampling method. A total of 150 questionnaires were administered among the households, out of which 126 questionnaires were returned, and 100 questionnaires were found correct and useful for the study was taken.

In addition to household data, the study gathered primary data from 30 loan officers of thirty financial institutions in flood-hit areas of Wayanad district in Kerala in order to understand more about the bank lending practices followed by the financial institutions during the floods. The sample of loan officers of financial institutions in the study includes the major public banks, private banks, Cooperatives, Non- Banking Financial Companies and Microfinance institutions (MFIs) who have agreed to cooperate with the study to provide the necessary information for the purpose of the study. The study indeed has two main variables, lending standards and loan demand. The variable lending standard in the study was measured by asking the question, "Over the last three months, how have your bank's credit standards for approving applications for loans or credit lines to households changed?" The next major variable loan demand, was measured by asking the question, "Over the last three months, how has the demand for loans or credit lines to households changed at your bank, apart from normal seasonal fluctuations?".

Results from the survey are reported as a net index (expressed as a percentage). The net index is calculated as the weighted percentage of respondents reporting an increase in demand for loans (or tightening of credit standards) minus the weighted percentage of respondents reporting a decrease in demand for loans (or easing of credit standards). Weightings are determined such that those responses indicating a modest change are given half the weighting of those reporting a significant change in the surveyed quarter. For the demand measures, a positive score indicates growth in demand for loans during the quarter, and for the measures of credit availability and standards, a negative score indicates an easing in credit standards during the surveyed quarter.

For demand for loans, net index = (% Reporting Substantial Increase + 0.5 x % Reporting Moderate Increase) –(% Reporting Substantial Decrease + 0.5 x % Reporting Moderate Decrease)

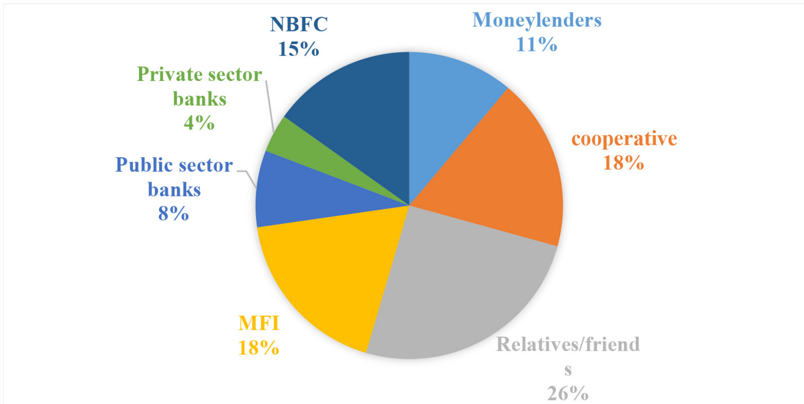
For credit standards, net index = (% Reporting Significant Tightening + 0.5 x % Reporting Moderate Tightening) –(% Reporting Significant Easing + 0.5 x % Reporting Moderate Easing)

Data analysis

IV.1 Household access to credit after natural disasters.

Among the sample households in the study only 71 per cent demanded or applied for credit. In fact, out of those who applied for credit, only 48 per cent of samples received assistance in terms of credit. This gives an indication on the tightening of lending standards by financial institutions in the aftermath of floods, which can be detrimental to the prospects of poor households. The average outstanding mean value of all reported loan applied by the households was approx. 128000 and the average mean amount received by households as reported was 41280. Thus, further highlighting instances of credit constraints faced by the households.

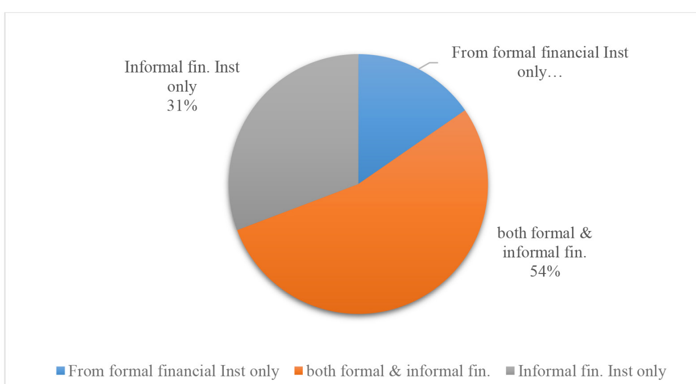
Figure 1: Share Of financial institution in overall credit



Source:- Primary data

The share of credit from relatives or friends in the overall share of credit is high, which indicates the existence of big family and community networks in society. The households are able to get these loans at a very cheap rate or at no interest rate without many difficulties compared to other sources of finance. After the credit extended by friends, the credit extended by MFIs and cooperative banks is the next major source of credit. This is basically because most of the institutions are local to the area they function and have a better mechanism to monitor the repayment of the clients; apart from this, they may have an existing good relationship with the client. NBFCs, moneylenders also seem to have decent share in the overall credit. Private banks occupies the least share which actually might be due to the fact that the banking relationship of the households with these banks would below.

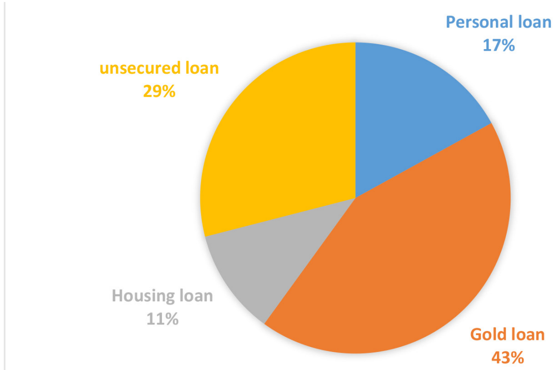
Figure 2: Percentage of households using credit from different sources



Source:- Primary data

In Figure 2, It is seen that 54 per cent of households have taken credit from both formal and informal sources. This basically hints to the problems of households in accessing credit from formal financial institutions. Due to credit rationing, the households are left to take credit from informal sources for the balance amount. It is also interesting to note that certain households took loans solely from informal sources, i.e. 31 per cent; even though this comprises of some households who were deprived of credit from formal sources, it also consisted of households who opined that due to damage to collateral records with them they approached informal sources straight away.

Figure 3: Type of loan accessed by households



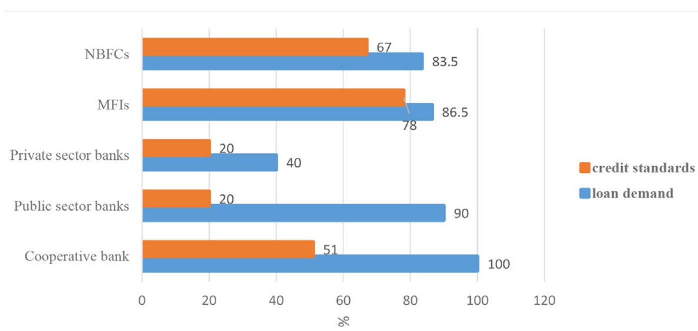
Source:- Primary data

From Figure 3, it becomes more evident that the major type of loan accessed by households was gold loans, as it was the most convenient form of loan for low and middle-income households due to the fewer formalities involved and easy disbursal of loans. Thus gold loans constitute 43 per cent, followed by unsecured loans (29 per cent) and personal loans at 17 per cent. Both basically have no collateral requirement, however, the personal loan is only available to salaried individuals, mostly belonging to low-middle-income or middle-income households taken through commercial banks. But unsecured loan is dealt mainly by MFIs and moneylenders who extends credit to low income, less creditworthy customers.

IV. 2 Lending standards of financial institutions.

1. Loan demands and credit standards of financial institutions in the past three months

Figure 4: NI for loans from households and credit standards of financial institution

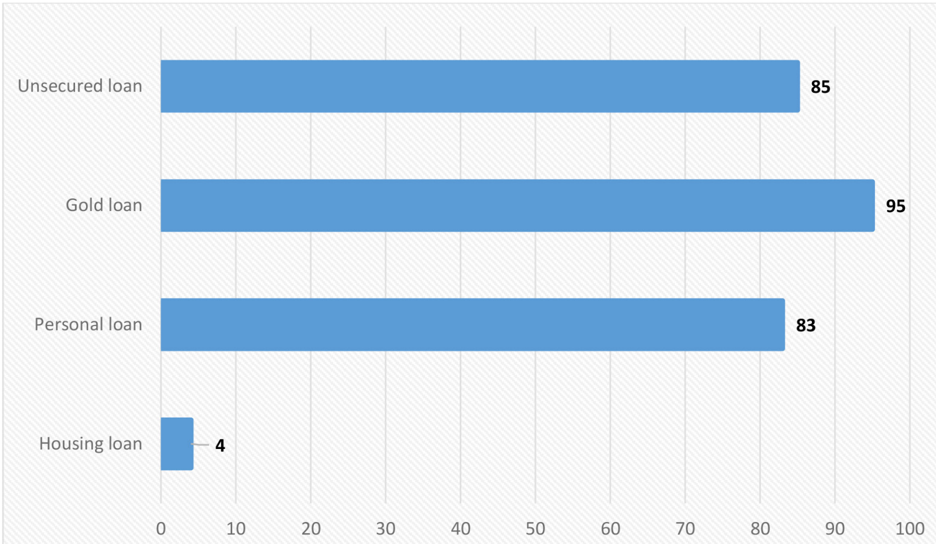


Source:- Primary data

Based on loan officers of 30 financial institutions, the net index values calculated gave positive scores with financial institutions such as cooperative banks in the area leading the charts of demand with a NI value of 100, which indicate a substantial increase in loan demand, followed by public sector banks with a score of 90, followed by MFIs, NBFCs and private sector banks being the last. This needs to be read along with the fact that there has been a significant tightening in credit standards followed by almost all types of financial institutions with MFIs becoming the most toughest of the lot with a NI value of 78, which is a positive signifying tight standards. Closely followed by NBFCs and cooperative banks. The high demand in the case of cooperative banks may be due to the fact that MFIs have significantly tightened its credit standards, and that of cooperative banks is comparatively lesser. Even though there was spike in demand for loans in public sector banks but the loan officers say that they just tightened credit standards moderately. Because of the social obligation of these banks, however, due diligence was also followed in the course.

2. Demand on common type of loans by the households

Figure 5: NI values on Demand on popular type of loans

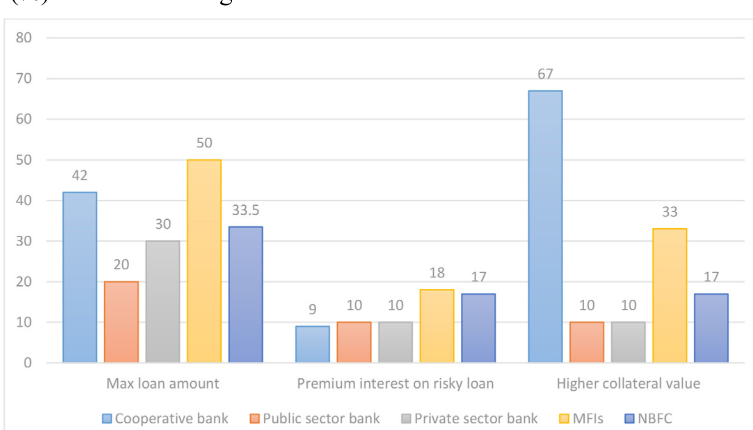


Source:- Primary data

In the above figure 5, it becomes much more clearer that the demand for a different type of loans has increased since all the values returned a positive score. The most sought after loan is gold loan (95) during the period; this is justifiable due to the fact that most of the people who look for immediate money over a short period will basically go for a gold loan. This is followed by unsecured loans (85) and personal loans (83), as they can be raised with minimal procedural formalities. Housing loans don't seem to have high demand compared to the rest, this is basically due to the fact that, it is one of the difficult loans to get requiring high creditworthiness and collateral requirement.

3. The terms and conditions of loans to households

Figure 6: NI (%) values for change in terms and conditions of loans to households



Source:- Primary data

It was already seen that all financial institutions had tightened their credit standards considerably. This can be further explored by enquiring more about the changes in terms and conditions of loans extended by financial institutions to households. From the above (figure 6) it can be interpreted that the terms and conditions of loans to households have been modified by all financial institutions over the past three months. A high collateral value and a ceiling on the maximum amount of loan to be disbursed being significant changes in the terms and conditions of financial institutions. Even though significant tightening is seen in all factors and in between financial institutions, there are also cases when certain institutions demand higher collateral value than other like cooperative banks or MFIs insisting in putting a ceiling on the maximum amount of loan to be disbursed. It can be interpreted that the credit standards of public sector banks being the more liberal at these times and that of cooperative banks being the most toughest.

Conclusion

This study investigated household access to credit in Kerala in the wake of Floods in the state by taking indebtedness as a proxy, and it was found that only 34 per cent of the households accessed credit, indicating tighter lending standards by the financial institutions. Besides this, the demand for credit and the source of credit utilised among the households were investigated by using a field survey of loan officers from various financial institutions. From which, it was found that the demand for credit from cooperative banks and nationalised banks was substantially very high. It was understood that gold loans and unsecured loans were the most sought after loans by households. However, the loan officers from various financial institutions reported that due to increased demand, the financial institutions tightened their standards considerably in order to avoid faulty clients. This is evident when we gather information from the households, it can be seen that households basically resorted to friends and relatives for credit, followed by MFIs and NBFCs. Thus, the study highlighted that the credit accessibility among the household in the wake of floods in Kerala carried significant hurdles. Compared to other financial institutions, public sector banks offer a better opportunity for households in terms of acquiring credit, however other financial institutions also must act judiciously in the wake of such events. The Government and State level Bankers committee must also ensure that the financial institutions implement the directives released by them in the ground level.

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